	er ID 107724 ber 30, 2013 10:05:18 AM		*107	724*				Ae	. Ast	>	Page 1
Revision ID: Item Name:	D2353 Stiffener 9/30/2013 Start Qty: 12.00	*12*	Accept	*N9000		100	)*	Setup	Start Stop	*N *N	S1* S2*
Required Date: Reference:	- •	*12*		Customer:	•						
Approvals:	Process Plan:QC:	Date: \3-9-20	Tooling:	Date Date	e:			Run	Start Stop		R1* R2*
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accep Qty	t Rej Qty		Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr		****								
D2353	Rev C										
*100 * *100* Waterjet  FLOW CNC Waterje		Dwg D2353 Dwg Rev:_ cessary	0.00  0.00  Prog Rev:	_ 2-			12		3		Jm13-69-3
110	QC2- Inspect parts off m	achine FAI/FAIB	0.00								
*110* QC Quality Control	Memo		0.00				12		and the second s		Jm13-09-30
<sup>120</sup> *12∩*	QC8- Inspect parts - seco	and check	0.00								DAO
QC	Memo		0.00	•				(B) 1	510-1	ΣI	

Quality Control

DQA:		Date:	:									DART
QA Closed:		Date	:		WORK ORDER NON-	-C(	ONFO	RMANCE / UF		Nork Order uj	odate only	AEROSPACE
Work Orde	or:				DISPOSITION					DEPARTMENT		
WORK OTUE	=1. 				Rework	1		Skid tubo	Cracetubal		Water let	
Part N	lo.				Scrap			Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality
					Use-as-is		I	noforming	Finishing	<del></del> [	re/Packaging	Other
NCR N	lo				Suspected Unapproved			Large Fab	Composite		Supplier	
Root			, ,	Desc	ription of work order update		Initial	Acti	ion	Sign &		
Cause	Date	Step	Qty		or non-conformance	Ch	nief Eng	Descri	iption	Date	Verification	QC Inspector
Design					•							
Doc/Data												
Equip/Tooling			1									
Handling/Pre												
Material												
Operator												
Offset/Setup												
Process										İ		
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Transport			İ									
Unapproved								-				
						FA	ULT CA	TEGORY				
Landir	ng Gear				General							
	Bendin	g			Bend		Folio/F	Program	Γ	Outside Dim	ensions	Pressure/Forced
	Centre	Not Conce	ntric		BOM/Route		Grain		Γ	Over/Under	tolerance	Set-up
	Cracks				Broken/Damage/Defect		Hardwa	ire	Γ	Part Incorred	it [	Temperature/Cure
	Crimp/	Kink/Ripple	e/Wave		Burrs		Inspect	ion Incomplete/Un	qualified	Part Lost/Mi	ssing	Weld
	Cuffs				Contamination		Instruct	tions Incomplete/U	nclear	Part Moved		Wrong Stock Pulled
	Crushir	g			Countersink		Misalig	ned/off center	[	Positioned V	ت Vrong	
[	Heat Tr	eat			Cut Too Short		Mislabe	eled	Γ	Power Loss/	Surge	Other
	Inspect	ion Strip ir	1 Tube		Drawing		Misread	d	-		<u> </u>	
	Marks/	Chatter			Drill Holes		Off-set		•	-		
ľ	Turning	Sequence	<b>)</b>		Finish		Out of (	Calibration				
	Wave/	wist in Tu	be		Fit/Function		Out of	Sequence				

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Work Orde Monday, Septem					*107	7724*							Page 2	
Item ID: Revision ID:	D2353				Accept	*N900	<b>040</b>	100	)*	Setup	Start	*N	S1*	
	Stiffener 9/30/2013 10/4/2013	Start Qty: 12.00 Req'd Qty: 12.00	=	ク* ク*		Cust Item I Customer:	D:				Stop	*N	S2*	
Approvals:	Process Pla	in:	Date:		Tooling: _ SPC (Y/N):		nte:			Run	Start Stop		R1* R2*	
Sequence ID/ Work Center ID 130 *130* Brake NC Brake NC	)	Operation Description  NC BRAKE  Memo Bend per Dw	g D2353		Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Re Qt	•	Reject Number	Insp. Stamp	5/4
140 <b>*14 *14 *</b> QC Quality Control		QC5- Inspect part completed Memo	teness to step on V	W/O	0.00				<u>U</u>	D_	<u>13-1</u> 0	<u>.01</u>	PD	

150

\*150\* HandFinish

Hand Finishing

Memo

Chemical Conversion Coat per QSI005 4.1

0.00

0.00

12 NEV13-1011

DQA:		_ Date:										™ ⊃APT
QA Closed:		Date:			WORK ORDER NON-	-C(	ONFO	RMANCE / UP		ork Order up	odate only	AEROSPACE
					DISPOSITION				AGAINST DE	•		
Work Orde	er:					1				1		, <del></del>
Part N	No.				Rework Scrap			Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality
					Use-as-is		i	noforming	Finishing	4	re/Packaging	Other
NCR N	No				Suspected Unapproved			Large Fab	Composite	1.00,0101	Supplier	
Root				Desci	ription of work order update		Initial	Actio	on	Sign &		
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	ption	Date	Verification	QC Inspector
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Doc/Data												
Equip/Tooling											ı	
Handling/Pre		ļ										
Material												
Operator												
Offset/Setup												
Process												
Supplier		•	-									
Training											:	
Transport												
Unapproved			11									
						FA	ULT CAT	regory				
Landi	ng Gear				General		•			-	<u></u>	_
	Bending				Bend		Folio/P	'rogram		Outside Dim	ensions	Pressure/Forced
ļ	Centre N	ot Conce	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
l	Cracks		•		Broken/Damage/Defect		Hardwa	re	-	Part Incorred		Temperature/Cure
	Crimp/Ki	nk/Ripple	e/Wave		Burrs		Inspecti	ion Incomplete/Und	qualified	Part Lost/Mi	ssing	Weld
	Cuffs				Contamination		Instruct	ions Incomplete/Ur	nclear	Part Moved		Wrong Stock Pulled
	Crushing				Countersink	L.	Misalig	ned/off center		Positioned V	Vrong	_
	Heat Tre				Cut Too Short		Mislabe	eled		Power Loss/	Surge	Other
	Inspectio	n Strip in	Tube		Drawing	L	Misread	d				
	Marks/Cl	hatter			Drill Holes		Off-set					
	Turning S	Sequence	!		Finish		Out of (	Calibration				
	Wave/Tv	vist in Tul	be		Fit/Function		Out of S	Sequence				

Work Orde				*107	724*			10 Aug 1 Aug	Page 3
Item ID: Revision ID: Item Name:	D2353 Stiffener			Accept	*N9000	14010	N* Set	up Start Stop	ונימו
Start Date: Required Date: Reference:	9/30/2013 10/4/2013	Start Qty: 12.00 Req'd Qty: 12.00	*12* *12*		Cust Item ID Customer:	:			14(1)
Approvals:	Process Pla	an:	Date:	Tooling: SPC (Y/N):	Date Date		Rur	1 Start Stop	*NR1* *NR2*
Sequence ID/ Work Center II 155 *155* QC Quality Control	)	Operation Description QC7-Inspect Chemical C	onversion Coat	Set Up/ Run Hours 0.00		Tool # Plan Code			Reject Insp. Number Stamp
160 *160* Powdercoat Powder Coating	า	Black Sandtex(Ref:4.3.5.  Memo START TIME	2',30	0.00 ) 0.00 _OVEN TEMPERATURE		-12	XS	mf	13/10/01
√\\13 <sup>7</sup> *170*	, τ	QC3- Inspect Part Finish	,	0.00		·	12×	1	M 10/10/0

Quality Control

DQA:		Date	e:			~	ONEO!		IDD ATE			<b>™DART</b>
QA Closed:		Date	9:		WORK ORDER NON	-((	JNFOI	RIVIANCE / U		Work Order ι	pdate only	AEROSPACE
Work Orde	ar.	<u>-</u>			DISPOSITION				AGAINST (	DEPARTMEN	T/PROCESS	
Part N	No				Rework Scrap Use-as-is			Skid-tube Machining noforming	Crosstube Small Fab Finishing		Water Jet od. Eng. Coor. ore/Packaging	Engineering Quality Other
NCR N	No	<u> </u>			Suspected Unapproved			Large Fab	Composite		Supplier	
Root Cause	Dat	e Step	Qty	Desc	ription of work order update or non-conformance	l .	Initial nief Eng		tion cription	Sign & Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved					·							
						FA	ULT CAT	EGORY				
Landir	Cracks Crimp Cuffs Crush Heat	Not Conc Kink/Ripp	le/Wave n Tube		General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread Off-set	on Incomplete/U ions Incomplete/ ned/off center led	· -	Outside Dir Over/Unde Part Incorre Part Lost/N Part Moved Positioned Power Loss	r tolerance ect lissing l Wrong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
	<del></del>	/Twist in To			Fit/Function	-	1	equence			······································	

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Work Order ID 107	'724
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\*107724\* Page 4 Monday, September 30, 2013 10:05:18 AM D2353 Item ID: Accept \*N900040100\* Setup Start **Revision ID:** Stop Stiffener **Item Name:** \*12\* **Start Date:** 9/30/2013 **Start Qty: 12.00 Cust Item ID: Required Date: 10/4/2013** Req'd Qty: 12.00 \*12\* **Customer:** Reference: Run Date: \_\_\_\_\_ Approvals: Process Plan: **Tooling:** Date: Stop QC: Date: \_\_\_\_\_ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. Work Center ID Description Run Hours Qty Code Number Stamp Oty 180 Identify as per dwg & Stock Location: 5732 0.00 \*180\* Packaging 0.00 Memo Packaging 190 QC21- Final Inspection - Work Order Release 0.00 \*190\* QC 0.00 Memo Quality Control

DQA:		Date:										<b>™</b> ∆∧DT
QA Closed:		Date:			WORK ORDER NON	-C(	ONFO	RMANCE / UPDAT		ork Order up	odate only	AEROSPACE
Work Order					DISPOSITION			AG		PARTMENT		
work Order	•			<del></del>	D	1				1		<b>1</b>
Part No	•				Rework			—	osstube nall Fab	Dun	Water Jet	Engineering
raitin	J				Scrap Use-as-is	1			inishing		d. Eng. Coor. e/Packaging	Quality Other
NCR No	o				Suspected Unapproved		men	· H	nposite	Nec/3tol	Supplier	Other
Root	T		T :	Desci	ription of work order update	!	nitial	Action		Sign &		
Cause	Date	Step	Qty		or non-conformance		ief Eng	Description	1	Date	Verification	QC Inspector
Design												
Doc/Data												
Equip/Tooling												
Handling/Pre												
Material												
Operator												
Offset/Setup												
Process												
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Training						ŀ					- ç`	
Transport												
Unapproved												
						FAU	JLT CAT	EGORY				
Landing	Gear				General							
ļ	Bending				Bend	Ш	Folio/P	rogram		Outside Dim	ensions	Pressure/Forced
	Centre No	ot Concer	ntric		BOM/Route	Ш	Grain			Over/Under	tolerance	Set-up
	Cracks				Broken/Damage/Defect		Hardwa	re		Part Incorrec	t	Temperature/Cure
	Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspecti	on Incomplete/Unqualifi	ied	Part Lost/Mis	ssing	Weld
	Cuffs			Ш	Contamination		Instruct	ions Incomplete/Unclear	r 🔲	Part Moved		Wrong Stock Pulled
	Crushing			Щ	Countersink		Misalig	ned/off center		Positioned W		_
	Heat Trea	it			Cut Too Short		Mislabe	led		Power Loss/S	Surge	Other
	Inspection		Tube		Drawing		Misread	ł				
	Marks/Ch				Drill Holes		Off-set		•			
	Turning S	equence			Finish		Out of C	Calibration	•			
	Wave/Tw	ist in Tub	e		Fit/Function		Out of S	jeauence	•			

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## **Picklist Print**

Monday, September 30, 2013 10:05:17 AM

Work Order ID:

107724

Parent Item:

D2353

Parent Item Name:

Stiffener

**Start Date:** 9/30/2013

Required Date: 10/4/2013

Page 1

**Start Qty: 12.00** 

Required Qty: 12.00

**Comments:** 

IPP Rev: A Removed from 9 Digit 05-11-10 EC

IPP: B 06.11.15 waterjet EC

IPP: c 06.12.07 ecn 836 ec

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.050		Purchased	No			100	sf	140.1287	0.1463	1.848			
2024-T3 .050 sheet									***	2.0	-		08-1 <u>0-81 m</u>

**Location** 

Loc Qty 140.1287 Loc Code

124643

MAT022

140.1287

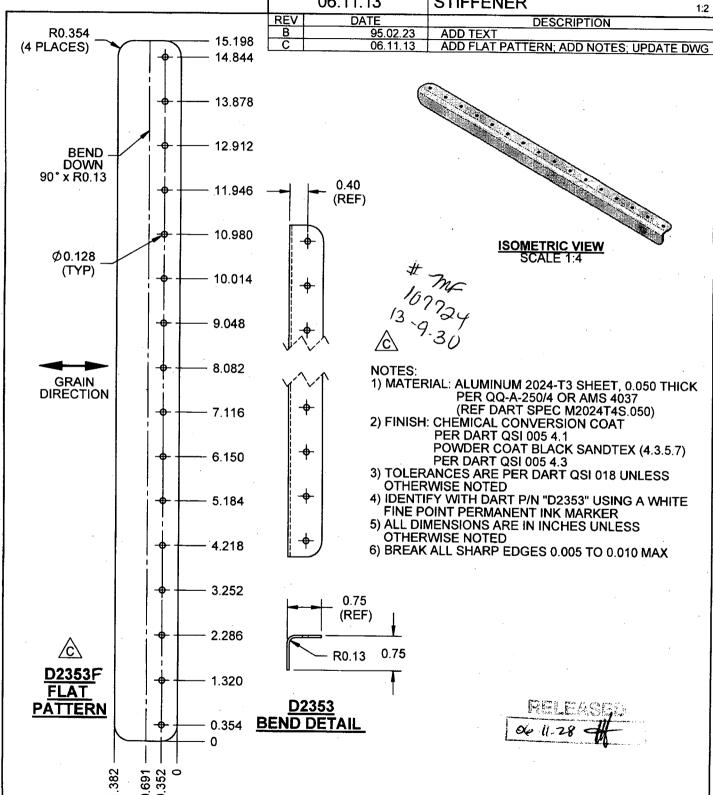
124643

DQA:		Date:			·							DART
QA Closed:		Date:			WORK ORDER NON-	-C(	ONFO	RMANCE / UPDATE	W	ork Order up	odate only	AEROSPACE
Work Orde	··		<u></u>		DISPOSITION			AGAIN:		PARTMENT		
Part N		<del> </del>			Rework Scrap			Skid-tube Crosstub	-	Pro	Water Jet	Engineering Quality
NCR N	0.				Use-as-is Suspected Unapproved			noforming Finishii Large Fab Composi	~ <del> </del>	-	e/Packaging Supplier	Other
Root				Desci	ription of work order update		Initial	Action		Sign &		· ·
Cause	Date	Step	Qty		or non-conformance	Ch	nief Eng	Description		Date	Verification	QC Inspector
Design												
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Operator								•		, !		
Offset/Setup								·				
Process												
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Transport								M				
Unapproved												
		•	<u> </u>			FAI	ULT CAT	EGORY				<u> </u>
Landin	g Gear				General		*		\$			
•	Bending				Bend		Folio/P	rogram		Outside Dim	ensions	Pressure/Forced
	Centre No	ot Concer	ntric		BOM/Route		Grain		.	Over/Under	<b>├</b>	Set-up
	Cracks				Broken/Damage/Defect		Hardwa	re		Part Incorred	t 📙	Temperature/Cure
	Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspecti	on Incomplete/Unqualified		Part Lost/Mi	<b>-</b>	Weld
	Cuffs				Contamination		Instruct	ions Incomplete/Unclear		Part Moved		Wrong Stock Pulled
	Crushing				Countersink		-1	ned/off center		Positioned W	 ∕rong	J
Γ	Heat Trea	it			Cut Too Short		Mislabe			Power Loss/:		Other
	Inspection	n Strip in	Tube		Drawing		Misread	1	_	•	. ~ <b>L</b> _	
	Marks/Ch	atter			Drill Holes		Off-set					
ſ	Turning S	equence			Finish		1	Calibration			······································	
	Wave/Tw	ist in Tub	e		Fit/Function		4	Sequence				

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DQA:		Da	te:		_							74	<sup>™</sup> ⊃∧ DT
QA Closed:		Da	to:		WORK ORDER NON	-C(	ONFO	RMANCE / UPDATE		onle Ondon			AEROSPACE
QA Closed.		Da	ie.	<del></del>	1		T		VV	ork Order up	date only		
Work Orde	er:				DISPOSITION			AGAINS	T DE	PARTMENT	/PROCESS		
				<del></del>	Rework	]	1	Skid-tube Crosstub	e	]	Water Jet		Engineering
Part N	No.				Scrap			Machining Small Fa	b	Pro	d. Eng. Coor.		Quality
				<del></del>	Use-as-is		Therr	noforming Finishin	ıg	Rec/Sto	re/Packaging		Other
NCR N	No	<del></del> .			Suspected Unapproved			Large Fab Composit	:e		Supplier	Щ	
Root				Desc	cription of work order update		Initial	Action		Sign &		П	,
Cause	Da	te Ste	p Q	ty	or non-conformance	Ch	nief Eng	Description		Date	Verificatio	n	QC Inspector
Design					·								
Doc/Data	<u>.                                    </u>				•								
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Unapproved													
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	Bend	-		-	Bend	_	1	Program	_	Outside Dim			Pressure/Forced
ļ		e Not Con	icentric	-	BOM/Route		Grain		_	Over/Under		_	Set-up
	Crack			-	Broken/Damage/Defect		Hardwa		_	Part Incorred		-	Temperature/Cure
		/Kink/Rip	ple/Wa	ave	Burrs	_	1	ion Incomplete/Unqualified	-	Part Lost/Mi	ssing	$\vdash$	Weld
	Cuffs	·		•	Contamination		4	ions Incomplete/Unclear	-	Part Moved		'لــــ	Wrong Stock Pulled
}	Crush	-		-	Countersink		1	gned/off center	-	Positioned V	_		Q.1
ŀ	Heat				Cut Too Short	-	Mislabe			Power Loss/	Surge	<u></u> '	Other
}		ction Strip		e	Drawing		Misread						
ŀ		s/Chatter		<del> </del>	Drill Holes	-	Off-set						
		ng Sequer		<del> </del>	Finish  Fit /Function	<u> </u>	4	Calibration					

DART AEROSPACE LTD	Work Order: /	17744
Description: Stiffener	Part Number:	D2353
Inspection Dwg: D2353 Rev: C		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
15.198	+/-0.010	15.A8°	•		<b>Y</b>	Jamob
0.966	+/-0.005	0.966"	-		V	James James
0.354	+/-0.010	0.3564	_		٧	J
0.128	+0.005/-0.000	0.130"	_		ν	
	,					

Measured by:	Jm	Audited by:	09	Prototype Approval:	N/A
Date:	13.09-30	Date: \	13-10-01	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	04.06.25	New Issue P/O D350-616-015	KJ/JLM	1
В	06.12.20	Dwg Rev. updated	KJ/JLM X	all
				75//

DQA:	Date:													DART
QA Closed:			Date:			WORK ORDER NON-CONFORMANCE / UPDATE  Work Order update only								
Work Order:						DISPOSITION		AGAINST DEPARTMENT/PROCESS						
Part No.  NCR No.						Rework Scrap Use-as-is Suspected Unapproved		Machining Small Fa Thermoforming Finishin		Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier			ngineering Quality Other
Root					Desci	ription of work order update		nitial	A	ction	Sign &			
Cause	[	Date	Step	Qty		or non-conformance	Ch	ief Eng	Des	cription.	Date	Verification	n	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved			•					. U						
							FAl	JLT CAT	EGORY					
Landir	ng Gea				_	General		1			7			
	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube					Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread	Hardware  nspection Incomplete/Unqualified  nstructions Incomplete/Unclear  Wisaligned/off center  Wislabeled		Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned W Power Loss/S	tolerance et ssing /rong	Set Ter We	ong Stock Pulled
}	Marks/Chatter Turning Sequence					Drill Holes Finish	-	Off-set Out of Calibration						
	Wave/Twist in Tube					Fit/Function		Out of Sequence				· · · · · · · · · · · · · · · · · · ·		